

4579a & 4579b

Form 504 DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY
State: Florida <small>11-5613</small>
DESCRIPTIVE REPORT. Sheet No. 4579a 4579b
LOCALITY: Tampa Bay Sarasota Pass, Manatee River and Terraceia and Palmasola Bays
1926
CHIEF OF PARTY: R.P. Eyman

C. & G. SURVEY
L & A
DEC 17 1926
Acc. No:

DESCRIPTIVE REPORT
to accompany
HYDROGRAPHIC SHEET "b"

4579 A+B

SARASOTA PASS, MANATEE RIVER
and
TERRACELA BAY

Instructions of June 3, 1924

STEAMER HYDROGRAPHER
RAYMOND P. EYMAN
Chief of Party

January 10, 1927.

(11)

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in
11 volumes of sounding records for

HYDROGRAPHIC SHEET NO. 4579A and B

Locality: FLORIDA WEST COAST

Chief of Party: R. P. Eymann

Plane of reference is MLW

2.9	ft. on tide staff at	Edmont Key
3.2	" ----- do ----	Sarasota Pass
3.7	" ----- do ----	Bradenton
1.0	" ----- do ----	Bird Key

For reduction of soundings, condition of records satisfactory
except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted.
3. Time meridian not given at beginning of day's work.
4. Time (whether A. M. or P. M.) not given at beginning of day's work.
5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered in wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of each day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks.



Chief, Division of Tides and Currents.

DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC SHEET "b"

1. Authority. Instructions from the Director, dated June 3rd, 1924.

2. General Description.

The area covered in this sheet is the inshore hydrography at the southeast side of Tampa Bay from entrance to Manatee River to Piney Point, Sarasota Pass, Palmasola Bay, Manatee River, Terraceia Bay, and Mc Gills Bay.

(A) Sarasota Pass - The maximum draft that can be taken thru Sarasota Pass is 7 feet. The Pass is generally all shoal except for the narrow channel. The Channel is marked by pile beacons, but these beacons cannot be depended upon as they are constantly being destroyed by barges navigating thru the narrow channel.

(B) Palma Sola Bay.- This Bay connects with Sarasota Pass $3/4$ mile north of Anna Maria Bridge. It is unimportant and shoal except for a narrow channel along the south shore. This channel is unmarked and difficulty is experienced without local knowledge.

The North End of Palma Sola Bay has an uniform depth of 5 to 8 feet. An extremely narrow and crooked channel across the flats connects this depression with the main swash channel. It is unmarked and should only be attempted with the best of local knowledge; 4 feet can be taken thru this channel on a rising or high tide.

During low tide the Bay is filled with bare shoals.

(C) Manatee River - The largest river entering Tampa Bay. The river varies from one-half mile to nearly one mile in width. A draft of 12 feet can be taken to Hooker's Point, 8 feet to Bradenton Dock, 7 feet to Rocky Bluff, and a draft of 3 feet can be carried for two miles up Braden River.

The entrance of Manatee River and the river channel as far as Rocky Bluff is marked well by beacons, some of which are lighted.

The river is well protected from all directions which makes it

a very good storm anchorage. The nature of the bottom makes the depression about 200 meters north of (F.R. 12) an excellent anchorage. On several occasions when hurricane warnings were issued the "Hydrographer" used this anchorage.

A satisfactory anchorage for boats unable to dock at Bradenton or Palmetto will be found approximately 350 meters west of Beacon 14 and approximately 100 meters south of the channel. The best anchorage in this vicinity is found when a group of old piles north of Fogarty Point is on range with Fogartyville Church Spire, and the black standpipe at Manatee on range with the center of the wooden high^{way} bridge between Bradenton and Palmetto.

Numerous dredges have been working in this vicinity and they have deepened the river. A shell dredge working 1/3 mile N.W. of Daniel Point has deepened that area considerably.

(D) Terraceia Bay - The depth in this Bay varies from 8 to 10 feet. The limiting draft that can be carried from Tampa Bay to Terraceia Bay is 5 feet and 6 feet from Manatee River to Terraceia Bay thru the dredged channel. The bridge at the cut-off is in very poor condition and is no longer lighted. There is no light on Bird Key lighted beacon. The beacons mark the best water.

The northeast end of Terraceia Bay is shoal and used only by fishermen. At high tide it is possible to take a skiff from the northeast end of Terraceia Bay thru Frog Creek, to Bishop's Harbor, to Tampa Bay.

(E) Mc Gills Bay - This Bay is very shoal and unimportant it being used only by fishermen. At high tide 4 feet can be taken to the entrance of Mc Gills Bay. But as the channel is very crooked and poorly marked it should not be attempted without local knowledge. The small stakes that mark the channel have been placed by fishermen for their own convenience. During a

rising tide, a launch drawing about twenty inches was taken from Tampa Bay to Terraceia Bay thru Mc Gills Bay.

3. Dangers.

(A) Manatee River - The rocks near Rocky Bluff are treacherous for small boats close to shore.

The sand spits that make out from each side of the entrance to Main Branch prove dangerous when cruising eastward toward Rye. This channel is marked by small 2 x 2 stakes which are not permanent.

A wreck exists about 200 yards northeast of signal "Fool".

The Manatee River near the city of Manatee is fouled with old piles and docks. When navigating in this vicinity it is highly important that a good lookout be kept for submerged piles.

At present the anchors for the pumping machinery for the caissons of the new bridge prove dangerous.

There are two dangerous bars in Manatee River which are marked by Beacons 7 and 12 respectively. Such a course should be set as to pass these beacons 50 to 100 meters away.

(B) Sarasota Pass - The dredged channel is very narrow between Beacons 4, 6, and 8. It is marked well by beacons, but they cannot be depended upon as stated previously. The turns in the channel are sharp and as the current sets about 30° across the channel several steamers have gone aground at this part of the pass.

4. Survey Methods.

Generally the survey was made with the ship's launch. The shoal area in Palmasola Bay and Sarasota Pass was made with the skiff under oars and when it was impossible to row at a satisfactory rate of progress the skiff was pulled over the shoals.

Mc Gills Bay was surveyed totally with the skiff. A Caille outboard motor was had but the grassy bottom kept the pump plugged and oars had to be resorted to.

The Northeast end of Terraceia Bay was surveyed with the skiff with a Caille outboard motor.

The area at the entrance to the Manatee River near the range beacons was surveyed with Punt No. 1. The area was covered satisfactorily with this punt even tho difficulty was experienced in keeping both motors running at the same time.

All channel lines were run with ship's launch.

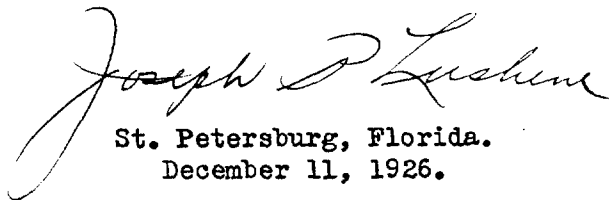
5. General.

It was found on plotting this sheet that the lines at the entrance to Manatee River which were run in the channel on the marked range did not plot thus on the smooth sheet. A careful recheck of the sheet was made and it was found that enough distortion had taken place to throw these lines off the range. A 10,000 projection of this area was then carefully laid out and the channel lines plotted on this in their true positions. No soundings have been penciled on the 20,000 projection on these lines and the 10,000 projection will supplement this sheet.

6. Organization.

The officers in charge of the survey were W. T. Combs and L. M. Zeskind of the party of Steamer Hydrographer, Raymond P. Eyman Comdg. On the smooth sheet the signals were plotted by J. C. Sammons, inked and protracted by Joseph P. Lushene.

Joseph P. Lushene


St. Petersburg, Florida.
December 11, 1926.

7. Additional Notes for Sheet "b".

In laying out the 1:10,000 projection referred to in paragraph No. 5 it was found that topographic signal "Alpha" did not plot correctly. The discrepancy was found to be in the listing of the D.M's. and D.P's. for Topographic Sheet # 2. There had been a plane table set-up about 1/3 mile to the westward of signal "Alpha" on the small point, and this point was the one listed instead of Alpha. When the 1:20,000 smooth sheet was made signal "Alpha" was plotted on it directly from the topographic sheet and the D.M. and D.P. scaled from this sheet were found as follows:

"Alpha"	Lat.	27° 31'	413 meters
	Long.	82° 40'	171 meters

STATISTICS SHEET NO. "b"

Date (1926)	Letter	Volume	Positions	Soundings	Miles Statute	Vessels
January 19th....	a	1	25	161	6.3	Launch
January 21st....	b	1	129	913	28.6	Launch
January 22nd....	c	1	27	171	5.5	Launch
January 26th....	d	1-2	177	809	20	Launch
January 27th....	e	2	141	942	31.5	Launch
January 28th....	f	2	81	451	15	Launch
February 12th...	g	3	83	519	21	Launch
February 23rd...	h	3	82	923	12.6	Launch & Skiff
February 24th...	j	3-4	84	913	17.2	Launch & Skiff
February 25th...	k	4	92	749	25	Launch
February 26th...	l	4-5	128	926	30.1	Launch
March 2nd.....	m	5	62	425	14.5	Launch
March 3rd.....	n	5	109	807	23.0	Launch
March 4th.....	p	6	144	1151	34.3	Launch
April 15th.....	q	6	48	372	5.1	Launch
April 16th.....	r	6-7	92	451	13.8	Launch
April 19th.....	s	7	109	581	14.5	Launch
April 20th.....	t	7	121	590	32.5	Launch
April 22nd.....	u	8	98	641	12.6	Punt
April 23rd.....	v	8	124	728	13.6	Punt
April 24th.....	w	8-9	132	632	16.0	Punt
April 30th.....	x	9	156	821	20.4	Punt & Launch
May 11th.....	y	9	65	347	9.5	Launch
May 12th.....	z	10	136	717	20.5	Launch
May 17th.....	a'	10	76	421	11	Launch
May 18th.....	b'	10-11	99	476	7.4	Launch & Skiff
May 19th.....	c'	11	67	359	7.1	Launch
July 19th.....	d'	11	56	620	7.0	Skiff
July 20th.....	e'	11	59	460	7.1	Skiff
Totals	29	11	2802	18,056	482.7	

Section of Field Records

Report on field sheet No. 4579^a

Surveyed in 1926.

Chief of Party - R. P. Eymann.

Surveyed By - W. F. Combs, L. M. Zischel

Projected by - J. P. Lushene

Sounding Plotted by - L. P. L.

Verified and inked by - H. E. MacLean

1. The records conform to the requirements of the general instructions.
2. The plan and character of the survey fulfil the requirement of the general instructions.
3. The plan and extent of development satisfy the specific instructions.
4. No complete system of cross lines was used. Wherever lines crossed, however, a good check resulted except in two or three cases.
5. The usual depth curves can be completely drawn.

Report on Hyd. 45799 (cont.)

6. The field plotting was completed to the extent prescribed in the general instructions.
7. The plotting was essentially done but the office draftsman found it necessary to respace a large percentage of the soundings between fixes - the most common fault being the omission of one or more soundings or the insertion of a sounding that had not been recorded - thus throwing out the location of the other soundings.
8. The junction with adjacent sheets are satisfactory.
9. No further surveying is required to fully develop important areas within the limits of this sheet.
10. Rating of work:
 - a. Character and scope of surveying. Excellent
 - b. Field drafting - good.
12. Reviewed by:

May 24, 1927

Respectfully submitted
H. E. MacEwen,
Draftsman.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
WASHINGTON

June 14, 1927.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4579a

Sarasota Pass, Manatee R., Terraceia and Palmasela Bays

Surveyed in 1926

Instructions dated June 3, 1924 (HYDROGRAPHER)

Chief of Party, R. P. Ryman.

Surveyed by W. T. Combs, L. M. Zeskind.

Protracted and soundings plotted by J. P. Lushene.

Verified and inked by H. E. MacEwen.

1. The records conform to the requirements of the General Instructions except that only in a few places are the beginnings and endings of lines referred to a signal or object.
2. The plan and character of the development fulfill the requirements of the General Instructions.
3. The plan and extent of development satisfy the specific instructions.
4. The sounding line crossings are as a rule very good.
5. The usual depth curves can be completely drawn.
6. The field plotting was completed to the extent prescribed in the General Instructions.
7. The protracting was excellently done, but the office draftsman found it necessary to replace a large percentage of the soundings between fixes, the most common fault being the omission of one or more soundings or the insertion of soundings not recorded, thus throwing out the location of other soundings.
8. The junction with H 4578 is good. The junction with H 4587, which junction extends over a line about 6 miles in length, varies almost uniformly by 1 foot. H 4587 was executed on a scale of 1 to 40,000 by the HYDROGRAPHER and the junction soundings have been accurately transferred. Inspection of the records fails to reveal the source

of this discrepancy. It is thought by the reviewer that the height of the sounding chair on the HYDROGRAPHER above the water may have caused a constant error in reading the leadline, or may have influenced the leadsman to apply a factor of safety to his readings. The HYDROGRAPHER'S soundings are uniformly shoaler than those taken by the launch.

9. No further surveying is required to develop the important areas.
10. In the vicinity of Ⓞ Cobb, at the extreme western limit of the sheet, the soundings indicate the existence of a small dredged channel and the remarks are made in the sounding records (69b and 61j to 63j) that soundings were taken in dredged channel. Existing charts do not show this channel and no information has been received by the office regarding it.
610 meters, 138 degrees from Ⓞ Pill, at the entrance to Palmasola Bay, is a line of 2 foot soundings (75g to 76g) which falls on a line of 8 and 9 foot soundings. A careful examination of the records fails to clear up the discrepancy. It is thought that the line 75g to 76g swung slightly off a straight course as the discrepancy occurs not at the fixed positions but at the intermediate part of the line at the edge of a shoal where the slope is steep.
11. Character and scope of surveying -- excellent.
Field drafting -- very good.

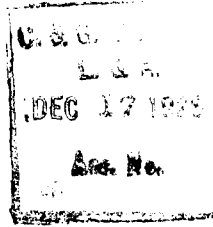
Reviewed by John A. Bond

Approved:

Chief, Field Records Section (Charts).

Chief, Section of Field Work (E. & T.).

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY



REG. NO. 4579a

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. "b"

REGISTER NO. 4579a

State Florida.

General locality ~~Gulf Coast of Florida.~~ Tampa Bay

Locality ~~Sarasota Pass, and Manatee River, and Terraceia Bay.~~ and Palmasola Bays

Scale $\frac{1}{20,000}$ Date of survey Jan. & July, 1926

Vessel Steamer Hydrographer.

Chief of Party Raymond P. Eyma.

Surveyed by W. T. Combs, L. M. Zeskind.

Protracted by Joseph P. Lushene.

Soundings penciled by Joseph P. Lushene.

Soundings in ~~fathoms~~ feet

Plane of reference M.L.W.

Subdivision of wire dragged areas by

Inked by

Verified by

Instructions dated June 3rd, 1924

Remarks:

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 4579b

HYDROGRAPHIC TITLE SHEET
(Made in Office)

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. "b" (Supplementary Sh.)

REGISTER NO. 4579b

State Florida

General locality Tampa Bay

Locality Dredged Channel-Approach to Manatee River

Scale 10,000 Date of survey May 12 - May 17, 1926

Vessel Hydrographer

Chief of Party R.P. Eyman

Surveyed by P.A. Smith

Protracted by J.P. Lushene

Soundings penciled by J.P. Lushene

Soundings in ~~fathoms~~ feet

Plane of reference M. L. W.

Subdivision of wire dragged areas by

Inked by

Verified by

Instructions dated June 3, 1924

Remarks: Supplementary to the 20,000 Sh. (4579a)

Soundings in Vol. 10 of 11 Vols. filed 4579a + 4579b